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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,089	07/30/2003	Nobuyuki Ito	1300-000001	8493
27572	7590	11/09/2006	EXAMINER	
HARNESSE, DICKEY & PIERCE, P.L.C.			ROY, SIKHA	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

2879

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/630,089

Applicant(s)

ITO ET AL.

Examiner

Sikha Roy

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) 9-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,7,8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

The Amendment, filed on September 5, 2006 has been entered and acknowledged by the Examiner.

Cancellation of claims 4-6 has been entered.

The objection to claim 1 is withdrawn.

Claims 9-22 are withdrawn and claims 1,3,7 and 8 are pending in the instant application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0060518 to Duineveld et al.

Regarding claim 1 Duineveld discloses (Fig.2C page 8, [0117] –[0122]) an electroluminescent display comprising a substrate 102, an electrode 103 provided on the substrate, protrusions (second relief pattern)108 provided on the substrate so as to cover the ends of the electrode 103 and are convexly curved relative to the surface of the substrate, an electroluminescent layer (104 and 105) provided in each opening which is located on the electrode and defined by adjacent protrusions 108 wherein the

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electroluminescent layer is in contact with the protrusion around the boundary between the EL layer and the protrusion and is curved in section in a direction opposite to the convexly curved protrusion. Duineveld further discloses the form of the protrusion 108 (second relief pattern 8) having thickness  $4.5\text{ }\mu\text{m}$  comprising a part of an arc and a flat part (broader section 108a) which extends continuously from the part of the arc.

Regarding claim 1, Duineveld discloses the claimed invention except for the limitation of thickness of the protrusion not less than  $5\text{ }\mu\text{m}$ . It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the second relief pattern or protrusion 108 with a thickness greater than  $5\text{ }\mu\text{m}$ , since optimization of workable ranges is considered within the skill of the art.

Regarding claim 3 Duineveld discloses the electroluminescent layer (104 and 105) around the boundary between the EL layer and the protrusion 108 is smooth and continuous in contact with the protrusion.

Regarding claim 7 Duineveld discloses (page 1 [0014], [0043], [0045]) the method of producing the EL display comprises the step of forming an organic layer on the surface of the substrate with protrusions provided thereon by using wet deposition method such as spin-coating or ink-jet printing.

Regarding claim 8 Duineveld discloses (Fig.4 [0125]) a mobile telephone comprising the electroluminescent display.

***Response to Arguments***

Applicant's arguments filed September 5, 2006 have been fully considered but they are not persuasive.

Applicant's arguments (Remarks section) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant alleges that cited document provides no disclosure or suggestion of the EL display having the combination of features recited in independent claim 1, but the Examiner respectfully disagrees. Duineveld discloses all the limitations of claim 1 except for the limitation of thickness of the protrusion being not less than 5  $\mu\text{m}$ . It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the second relief pattern or protrusion 108 with a thickness greater than 5 $\mu\text{m}$ , since optimization of workable ranges is considered within the skill of the art. The examiner hence asserts that the limitations are read from Duineveld and the rejections of claims 1,3, 7 and 8 are proper.

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**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Sikha Roy*

Sikha Roy  
Patent Examiner  
Art Unit 2879